UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER  I Work: D RILL  REENTER  I Unit or CA Agreement, Name and No. I I findian, Allottee or Tribe Name I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I Unit or CA Agreement, Name and No. I I See State State I I I See I I I I	Form 3160-3 (August 1999)		l Conservation 625 N. French Hobbs NM 9	UTIVA	<b>a, District I</b> FORM APPRO OMB No. 1004	VED -0136	
APPLICATION FOR PERMIT TO DRILL OR REENTER       NM-0559639         Work:       DRILL       REENTER         States Name and Well No.       James Federal, Well No.         Join Well:       Gas Well       Other         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and Well No.       James Federal, Well No.         States Name and No.       States Name and No.         States Name And No.       States Name and No.         States Name And No.       States Name And No.         States Name And Survey or Area       States Name And Survey or		`ES	TODOS, NINI 8	6 <b>24</b> 9	Expires November		
APPLICATION FOR PERMIT TO DRILL OR REENTER       6. If Indian, Allottee or Tribe Name         Work:       D RILL       REENTER       6. If Indian, Allottee or Tribe Name and No.         Work:       D RILL       REENTER       7. If Unit or CA Agreement, Name and No.         Work:       D OI Well       Gas Well       Other       Single Zone       Multiple Zone         York:       D OI Well       Gas Well       Other       Single Zone       9. API Well No. 11       507.7         Coperator       9. API Well No.       10. Field and Pool, or Exploratory       9. API Well No.       11. Sec. 7. R. M. or Bik. and Survey or Area         So sowell, NM 88202       505/523-1561       Triste Draw Delaware West       11. Sec. T. R. M. or Bik. and Survey or Area         So to 20 Zone same       Cardeback Constrolled Weiter Bescher       Sec. 29-1723S-R32E       13. State         So and zone same       Cardeback Constrolled Weiter Bescher       12. County or Parish       13. State         So and so and the requirements of a constrolled Weiter Bescher       10. Fleid and Pool, or Exploratory       1440         In meters ding, init line, if any) 660'       1440       40       10.         It may proposed location       13. County or Parish       13. State         Well, Milling, completed, or, on this lease, fill cocation is on National Forest System Lands, th							
with and and bell       DRUL       IREENTER         if Well:       O oil Well       Gas Well       Other       Single Zone       Multiple Zone         if Operator       9. API Well No.       James Federal, Well No.         if Operator       9. API Well No.       James Federal, Well No.         if Operator       9. API Well No.       Jones Federal, Well No.         if Operator       9. API Well No.       Jones Federal, Well No.         if Operator       505/523-1581       Triste Draw Delaware West         in of Well (Report location clearly and in accordance with any State requirements.*)       in State regurements.*)         acc:       1980 FNL & 660' FEL       Sec. 29-123S-R32E         in miles and direction from nearest town or post office*       12. County or Parish       13. State         east of Carisbad, NM       1440       40       NM         rom reposed ford. zong       190. Proposed Depth       20. BLM/BIA Bond No. on file       NM         in on this less, ft.       1320'       8700'       NM+109         is on this less, ft.       1320'       8700'       NM+109         is on this less, ft.       1320'       8700'       3-4 weeks         24. Attachments       3. 4 weeks       3. 4 weeks       3. 4 weeks			EENTER		6. If Indian, Allottee or Tr	ibe Name	
If Well       Gas Well       Other       Single Zone       Multiple Zone       James Federal, Well No. 11       507:3         If Operator       9. API Well No.       30. Place - 36, 77.3       Sold 2536, 77.3       Sold 2536, 77.3         Image: State Corp.       30. Phone No. (include area code)       10. Field and Pool, or Exploratory       Triste Draw Delaware West         In of Well (Report location clearly and in accordance with any State requirements.*)       II. Sec. T. R. M. or Bik. and Survey or Area         in of Well (Report location clearly and in accordance with any State requirements.*)       II. Sec. 29-T23S-R32E         is and forction from mearest town or post office*       I2. County or Parish       I3. State         east of Carlsbad, NM       16. No. of Acres in lease       17. Spacing Unit dedicated to this well       NM         is nearest drig, unit line, if any) 660'       1440       40       40         is nearest drig, unit line, if any) 660'       1440       40       3 4 weeks         22. Approximate date work will start*       23. Estimated duration       3 4 weeks         24. Attachments       23. Attachments       3 4 weeks       3 4 weeks         25. Plan (if the location is on National Forest System Lands, the alb be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by a reaxisting bond on file (see titem 20 abov); <td>la. Type of Work: 🔽 DRILL 🔲 REEN</td> <td>ITER</td> <td>·····</td> <td></td> <td>7. If Unit or CA Agreemen</td> <td>t, Name and No.</td>	la. Type of Work: 🔽 DRILL 🔲 REEN	ITER	·····		7. If Unit or CA Agreemen	t, Name and No.	
etroleum Corp.       3b. Phone No. (include area code)       10. Field and Pool, or Exploratory         136       Roswell, NM 88202       505/523-1581       10. Field and Pool, or Exploratory         137       not Weil (Report location clearly and in accordance with any State requirements.*)       11. Sec. T. R. M. or Blk and Survey or Area         acc 1980 FNL & 660' FEL       Carlsbad, Controlled Water Bases       Sec. 29-T23S-R32E         is mate and direction from nearest town or post office*       12. County or Parish       13. State         east of Carlsbad, NM       16. No. of Acres in lease       17. Spacing Unit dedicated to this well       13. State         is nearest       16. No. of Acres in lease       17. Spacing Unit dedicated to this well       13. State         is nearest       19. Proposed Depth       20. BLM/BIA Bond No. on file       NM         is or lease file, f.       1320'       8700'       NM-1109         ors (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       3. 4 weeks       24. Attachments         g. completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see         10. Bee filed with the appropriate Forest System Lands, the all be filed with the appropriate Forest System Lands, the all be filed with the appropriate Forest System Coffice.       4. Bond t		🗖 s	ingle Zone 🔲 Mu	ltiple Zone		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
3b. Phone No. (include area code)       10. Field and Pool, or Exploratory         136. Roswell, NM 88202       505/523-1581       Triste Draw Delaware West         no Well (Report location clearly and in accordance with any State requirements.*)       II. Sec., T., R., M., or Bik. and Survey or Area         acc 1980; FNL & 660; FEL       Carlsback Confirolad Wieter Besch       Sec. 29-T23S-R32E         based prod. zone same       Carlsbad, NM       II. Sec., T., R., M., or Bik. and Survey or Area         east of Carlsbad, NM       Form proposed       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         in measest ori lease (rin, fin, nearest drig, unit line, if any) 660;       1440       40         from proposed location*       19. Proposed Depth       20. BL//BIA Bond No. on file         well, drilling, completed,       19. Proposed Depth       20. BL//BIA Bond No. on file         g. completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:       23. Estimated duration         g. completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g. Completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).	2. Name of Operator						
36       Roswell, NM       88202       505/523-1581       This burdle decides         10       File Draw Delaware West       11. Sec., T., R., M., or Bik. and Survey or Area         acc       1980' FNL & 660' FEL       Sec. 29-T23S-R32E       11. Sec., T., R., M., or Bik. and Survey or Area         acc       1980' FNL & 660' FEL       Sec. 29-T23S-R32E       13. State         e from proposed*       16. No. of Acres in lease       17. Spacing Unit dedicated to this well       18. State         e from proposed virtual time, fi any) 660'       1440       40       40         if on proposed location*       19. Proposed Depth       20. BLM/BIA Bond No. on file       NM         if on proposed location*       13. 20'       8700'       NM-1109       23. Estimated duration         july 15, 2004       23. Attachments       24. Attachments       24. Attachments       25. Caread by an existing bond on file         g. completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:       4. Bond to cover the operations unless coverset by an existing bond on file (see them office)         g. Plan.       Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless coverset by an existing bond on file (see them office)         Wattreeffectume Corp.       Name (Printed Typ	Harvard Petroleum Corp. 3a. Address	3h Phone N	(include area code)				
n of Well (Report location clearly and in accordance with any State requirements. *) acc 1980' FNL & 660' FEL based prod. zone same  Carlsback Controlled Widew Bester  Sec. 29-T23S-R32E  12. County or Parish Lea  NM  Form proposed* 10. No. of Acres in lease 11. Spacing Unit dedicated to this well or lease line, ft. nearest drig. unit line, if any) 660' 1440 40  from proposed location* truth, drilling, completed, or, on this lease, ft. 1320' B700' NM-1109  Sec. 29-T23S-R32E 13. State NM  Controlled Widew Bester  1440 40  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 13. State Lea NM  Sec. 29-T23S-R32E 13. State NM  Sec. 29-T23S-R32E 14. State NM  Sec. 29-T23S-R32E 14. State Sec. 29-T23S-R32E 14. State Sec. 29-T23S-R32E 15. State State Sec. 29-T23S-R32E 15.	P.O. Box 936 Roswell, NM 88202			,	· · ·		
Sec. 29-T23S-R32E         Sec. 29-T23S-R32E         in miles and direction from nearest town or post office*         east of Carlsbad, NM         Least and direction from nearest town or post office*         east of Carlsbad, NM         to make and direction from nearest town or post office*         east of Carlsbad, NM         to nearest of Carlsbad, NM         to a colspan="2">It is not colspan="2">It is not colspan="2">Sec. 29-T23S-R32E         12. County or Parish Lea         It is not colspan="2">It is not colspan="2">Sec. 29-T23S-R32E         It is not colspan="2">It is not colspan="2" It							
Constance       Constance       Sec. 29-T23S-R32E         east of Carlsbad, NM       12. County or Parish       13. State         east of Carlsbad, NM       Lea       NM         e from proposed*       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         or lease line, ft.       1440       40         from proposed location*       19. Proposed Depth       20. BLM/BIA Bond No. on file         it well, drilling, completed,       07. on this lease, ft.       1320'         grow on this lease, ft.       1320'       8700'         use state in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:       23. Estimated duration         3. 4 weeks       3 - 4 weeks         grow plan.       24. Attachments         gr. completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:         certified by a registered surveyor.       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         grow plan.       5. Operator certification.         all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by an axis be required by the authorized officer.         "gran.       Soceration certification.       6. Such other site specific information and/or plans as may be required by the authoriz	At surface 1980' FNL & 660' FEL	ung bruit requ					
in miles and direction from nearest town or post office*       12. County or Parish       13. State         east of Carlsbad, NM       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         or lease line, ft.       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         or lease line, ft.       1440       40         from proposed location*       19. Proposed Depth       20. BLM/BIA Bond No. on file         or, on this lease, ft.       1320'       8700'         nss (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks       3 - 4 weeks         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g Plan.       Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         *       Mame ( <i>PrintedTyped</i> )       Sectific information and/or plans as may be quired by the authorized officer.         *       Name ( <i>PrintedTyped</i> )       Sectific information and/or plans as may be quired by the authorized officer.         *       Name ( <i>PrintedTyped</i> )       Sectific information and/or p	At proposed prod. zone come	and Continue	d Water Besta	1			
east of Carlsbad, NM       Lea       NM         e from proposed* to rease line, ft mearest drig, unit line, if any) 660'       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         or lease line, ft mearest drig, unit line, if any) 660'       1440       40         if com proposed location* it well, drilling, completed, or, on this lease, ft.       19. Proposed Depth       20. BLM/BIA Bond No. on file         if well, drilling, completed, or, on this lease, ft.       1320'       8700'       NM-1109         ms (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments       24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:       4. Bond to cover the operations unless coversed by an existing bond on file (see Item 20 above).         9 Plan.       Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       14. Bond to cover the operations.         4. Such other site specific information       6. Such other site specific information and/or plans as may be equired by the authorized officer.         4. Mame (Printed/Typed)       2. Such other site specific information       2. Such other site specific information and/or plans as may be equired by the authorized officer.         4. Mame (Printed/Typed						13 State	
e from proposed* to nearest or rease line, ft. nearest drig. unit line, if any) 660'       16. No. of Acres in lease       17. Spacing Unit dedicated to this well         or rease line, ft. nearest drig. unit line, if any) 660'       1440       40         from proposed location* twell, drilling, completed, or, on this lease, ft.       1320'       8700'       NM-1109         ons (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:         certified by a registered surveyor. g Plan.         e Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).         Mame (Printed/Typed) (Signature)         George R. Smith         Mame (Printed/Typed) (Signature)         // S/ Joe G. Lara         Name (Printed/Typed) (Signature)         Office       CARLSBAD FIELD OFFICE	36.5 miles east of Carlsbad, NM				-		
to rearest or leasest dirg, ft. nearest dirg, unit line, if any) 660'       1440       40         if or proposed location* st well, drilling, completed, for, on this lease, ft.       19. Proposed Depth       20. BLM/BIA Bond No. on file         if well, drilling, completed, for, on this lease, ft.       1320'       8700'       NM-1109         ons (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:         certified by a registered surveyor. g Plan.         e Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Offrice).         Mame (Printed/Typed)         George R. Smith         Mame (Printed/Typed)         George R. Smith         Signature)         /S/ Joe G. Lara         Office       CARLSBAD FIELD OFFICE	15. Distance from proposed*	16 No of	Acres in lease	17 Snacin			
Interest drig, unit line, if any) 660'       1440       40         if rom proposed location*       19. Proposed Depth       20. BLM/BIA Bond No. on file         if well, drilling, completed, for, on this lease, ft.       1320'       8700'       NM-1109         ons (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:         certified by a registered surveyor.         g Plan.         e Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).         Mame (Printed/Typed)         George R. Smith         Mame (Printed/Typed)         George R. Smith         Signature)         /s/ Joe G. Lara         Office       CARLSBAD FIELD OFFICE	location to nearest property or lease line, ft.			17. Opach			
at well, drilling, completed, for, on this lease, R.       1320'       8700'       NM-1109         State       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments       24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g Plan.       2. Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         5. Operator certification.       5. Operator certification.       6. Such other site specific information and/or plans as may be required by the authorized officer.         Mame (Printed/Typed)       Ceorge R. Smith       24. 2004         Mame (Printed/Typed)       24. 2004       24. 2004         Signature)       /s/ Joe G. Lara       Name (Printed/Typed)         Office       CARLSBAD FIELD OFFICE	(Aline to mean and drive line if any)						
1320'       8700'       NM-1109         ons (Show whether DF, KDB, RT, GL, etc.)       22. Approximate date work will start*       23. Estimated duration         July 15, 2004       3 - 4 weeks         24. Attachments       24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g Plan.       e Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         6. Such other site specific information and/or plans as may be required by the authorized officer.       5. Operator certification.         Mame (Printed/Typed)       6eorge R. Smith       6eorge R. Smith         Harvard Petroleum Corp.       Name (Printed/Typef)       0         (Signature)       /s/ Joe G. Lara       0         (Signature)       Name (Printed/Typef)       0         Office       CARLSBAD FIELD OFFICE	<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for on this location.</li> </ol>	19. Proposed Depth 20. BLM/BIA Bond No. on file					
July 15, 2004       3 - 4 weeks         24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:         certified by a registered surveyor.         g Plan.         2 Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).         4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         5. Operator certification.         6. Such other site specific information and/or plans as may be required by the authorized officer.         Mame (Printed/Typed)         George R. Smith         (Signature)         /s/ Joe G. Lara         Name (Printed/Typed)         Office         CARLSBAD FIELD OFFICE		8700'		NM-110	9		
24. Attachments         g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:         4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g Plan.       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).       4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).         g. Operator certification.       5. Operator certification.       5. Operator certification.         6. Such other site specific information and/or plans as may be required by the authorized officer.       5. Operator certification.         g Meury A. Armthy       George R. Smith       5. Signature)         (Signature)       /s/ Joe G. Lara       16 2004         Office       CARLSBAD FIELD OFFICE					23. Estimated duration		
g, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form: certified by a registered surveyor. g Plan. to Use Plan (if the location is on National Forest System Lands, the all be filed with the appropriate Forest Service Office).	3685' GL				3 - 4 weeks		
<ul> <li>4. Bond to cover the operations unless covered by an existing bond on file (see lem 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information and/or plans as may be required by the authorized officer.</li> <li>Mame (Printed/Typed)</li> <li>George R. Smith</li> <li>Mame (Printed/Typed)</li> <li>S/ Joe G. Lara</li> <li>Mame (Printed/Typed)</li> <li>Mame (Printed/Typed)</li> <li>S/ Joe G. Lara</li> <li>Mame (Printed/Typed)</li> <li>Mame (Printed/Typed)<!--</th--><th></th><th></th><th></th><th></th><th></th><th></th></li></ul>							
Harvard Petroleum Corp. (Signature) /s/ Joe G. Lara Date Jol 16 2004 Office CARLSBAD FIELD OFFICE	<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Office).</li> <li>Signature</li> </ol>	Name	6. Such other site authorized offi (Printed/Typed)	e specific info	ormation and/or plans as may	v be required by the	
Office CARLSBAD FIELD OFFICE	Title Agent for: Harvard Petroleum Corp.				Fr. 1118	Δ Δ Δ7	
Office CARLSBAD FIELD OFFICE	Approved by (Signature) /s/ Joe G. Lara	Name	(Printed/Typer)	loe G.	Lara Date	16 2004	
poroval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct							
ereon	operations thereon.	lds legal or equita					
C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United	Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma	ke it a crime for a	ny person knowingly	and willfully	to make to any department or	agency of the United	
received and the statements of representations as to any matter within its jurisdiction.	states any tase, nethous of traudulent statements of representations	as to any matter w	within its jurisdiction.	<u></u>			
f approval, if any, are attached. C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency o lse, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	/s/ Joe G. Lara         Title       Active FIELD MANAGER         Application approval does not warrant or certify that the applicant ho operations thereon.         Conditions of approval, if any, are attached.         Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma States any false, fictitious or fraudulent statements or representations         *(Instructions on reverse)         Lease Responsibility Statement: Harvard Petersen	Office Ids legal or equita ke it a crime for a as to any matter v troleum Corp.	e CARLSB ble title to those rights ny person knowingly vithin its jurisdiction.	AD FIE s in the subject APPRC and willfully able terms,	LD OFFICE lease which would entitle the a DVAL FOR 1 Y to make to any department or	applicant EAR agency o	
	APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND A			Ge	corge R. Smith, agent		
	SPECIAL STIPULATIONS				1		
ERAL REQUIREMENTS AND ALEGED	ATTACHED				K	-	

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<u>District 1</u> 1825 N. French Dr. Hobbe, NM 88240 <u>District 11</u> 811 South First, Artesia, NM 88210 <u>District 11</u> 1000 Rie Brazes Rd., Aztec NM 87410

District IV 2040 South Pacheco, Santa Fe, NM 87505

# State of New Mexico Energy, Minerals & Natural Resources

Form C-102 Revised March 17, 1999 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

# OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, N M 87505

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code 59945 API Number Pool Name 30-025-36173 Triste Draw Delaware West Property Code Property Name Well Number 5073 JAMES FEDERAL 11 OGRID No. 10155 Operation Name Elevation HARVARD PETROLEUM 3685 Surface Location UL or Lot No. Section Township Range Lot Idn. Feet from the North/South line Fast from the East/West line County 32 - EH29 23-5 1980 660 NORTH EAST LEA Bottom Hole Location If Different From Surface UL or Lot No. Section Township Range Lot Kin. Feet from the North/South line Feet from the East/West line County **Dedicated Acres** Joint or Infill Consolidation Code Order No. 40 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICATION I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. 980 ark Signature George R. Smith 660' Printed Name agent LAT N32 16'38.4" LON W103'41'25.1" NAL '83 Title April 22, 2004 Date KXXXXXXXXXXXXXXXXX SURVEYOR CERTIFICATION NM-0559539 I HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT WAS PLOTTED FROM FIELD NOTES OF ACTULL SURVEYS MADE BY ME OR UNDER HT SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MT KNOWLEDCE AND BELLEP. APRIL\_8\_2004 SUNKY REDD Date Pana Seqi at Protect Nea Bail EER 5412 SIANE ₽E

#### **APPLICATION FOR DRILLING**

#### HARVARD PETROLEUM CORP. James Federal, Well No. 11 1980' FNL & 660' FEL, Sec. 29-T23S-R32E Lea County, New Mexico Lease No.: NM-0559539 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Harvard Petroleum Corp. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Rustler	1120'	Lower Brushy Canyon	8220'
Salt	1470'	Bone Spring	8470'
Delaware	4640'	Bone Spring Sand	8560'
Cherry Canyon	5660'	T.D.	8700'
Brushy Canyon	7300'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: Possible in the Delaware 4640 – 8470" and the Bone Spring below 8470".

Gas: None expected.

#### 4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	J-55	ST&C	550'	Circ. 400 sx "C"
11"	8 5/8"	24.0#	J-55	ST&C	2,500'	
11"	8 5/8 "	32.0#	J-55	ST&C	4,500'	Circ. 1200 sx 35/65 Poz +100 sx "H"
7 7/8"	5 1/2"	15.5#	K-55	LT&C	6,850'	450 sx 35/65/ Poz + 100 sx "C" neat
7 7/8"	5 1/2"	15.5#	K-55	LT&C	8,700'	400 sx 15/61/11 Poz-C-CSE, 2 stage

5. Proposed Control Equipment: A 10" 3000 psi wp Shaffer Type "E" BOP will be installed on the 13 3/8" casing and operated as a 2M system. Casing and BOP will be tested with the rig pump before drilling out with 11". Request waiver to test BOPE and the 8 5/8" casing to a maximum of 2000 psi wp in accordance with Onshore Oil & Gas Order No. 2. See Exhibit "E".

6. MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
0' - 550':	Fresh water w/gel spud mud:	8.4 - 9.0 ppg	32 - 38	No W/L control
550' – 1400'	Fresh water w/gel spud mud	8.4 - 9.0 ppg	32 - 38	No W/L control
1400' - 4500':	Cut Brine w/gel & lime:	9.0 - 10.0 ppg	28 - 30	No W/L control
4500' - 8700':	Fresh Wtr w/gel & starch:	8.4 - 8.8 ppg	29 - 31	W/L control 10-15 cc +/-

7. Auxiliary Equipment: Blowout Preventer, Kelly cock, flow sensors and stabbing valve.

# 8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless conditions warrant.

Logging: T.D. to 4500': GR-CNL-LDT-DLL

T.D. to Surface: GR-Neutron

Coring: Rotary sidewall as dictated by logs.

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9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 3828 psi and a surface pressure of 1914 psi with a temperature of 147°.

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- 10. H<sub>2</sub>S: None expected. None in previous wells.
- 11. Anticipated starting date: July 15, 2004 Anticipated completion of drilling operations: Approximately 25 days.

#### MULTI POINT SURFACE USE AND OPERATIONS PLAN

HARVARD PETROLEUM CORP. James Federal, Well No. 11 1980' FNL & 660' FEL, Sec. 29-T23S-T32E Lea County, New Mexico Lease No.: NM-0559539 (Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well; the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Topographic map showing the location of the proposed well as staked. The well site location is approximately 36.5 road miles east of Carlsbad, NM. Traveling east of Carlsbad on County Rd #605 and NM Highways 31 and 128, there will be 33.5 miles of paved highway and 3 miles of oilfield roads.
- B. Directions: Travel southeast from Carlsbad, NM on County Rd. # 605, the refinery road, for 12.5 mile to NM Highway #31. Turn left on NM #31 for approximately 2.5 miles, and then turn east onto NM Highway # 128 for 17.4 miles. Turn left (north) onto CR-29 and continue north for 1.7 miles; turn right (east) for 1.6
  miles to the Littlejack Fed. #1 well pad. The road continues east for 1.0 mile the James Fed. #3 well site. Continue east to the James Fed. #4 well pad and then turn north to the James Fed. #6 well site. The proposed access road will start at the SE corner of this pad and run east for 1100 feet to the southwest corner of the proposed well site.

# 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 1100 feet long. The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None.
- E. Cuts and Fills: Minor cuts to level the 3 4 foot dunes will be required.
- F. Gates, Cattle guards. None required. One is all ready in the current access road.
- G. Off lease right of way: None required.

#### 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

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#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. Harvard Petroleum Corp. has production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities will be installed on the drilling pad. A 3" poly SDR 11 oil flow line will run west parallel to the access road to the James Fed. No. 6 and then parallel to the pipeline R/W to the James Fed. Well No. 3 tank battery, 1980' FSL & 2306' FWL, Sec. 29-T28S-R32E.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, or from a State pit in SE4 SW4 Sec. 32-T23S-R32E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

#### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks at the James Fed., Well #1 water disposal well, a BLM approved disposal system.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

## 8. ANCILLARY FACILITIES:

A. None required.

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#### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.
- B. Mat Size: 255' X 160', plus 120' X 120' reserve pits on the north.
- C Cut & Fill: The location will require a 2 foot cut on the north and east with fill to the south and west.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

# **10. PLANS FOR RESTORATION OF THE SURFACE:**

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

# **11. OTHER INFORMATION:**

- A. Topography: The proposed well site and access road are located on top of Bootleg Ridge with the access road having a 1% slope from the east to the west. The location has an elevation of 3685' GL.
- B. Soil: The topsoil at the well site is a brown to yellowish-red fine sand to a fine sandy loam soil with occasional small sand dunes. There should be caliche at a depth of 40 to 60 inches. The soil is part of the Kermit and Palomas fine sands land complex.
- C. Flora and Fauna: The vegetation cover has a very sparse to fair grass cover of three-awn, sand dropseed, grama and bluestem, with the primary cover being plants of mesquite, yucca, broomweed, shinnery oak brush, sage, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None.
- E. Residences and Other Structures: None in the immediate vicinity, except oil well production facilities.
- F. Land Use: Cattle grazing.

#### 11. OTHER INFORMATION: cont....

- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is no evidence of archaeological, historical or cultural sites in the staked area. Archaeological Survey Consultants, P. O. Box 2285, Roswell, NM 88202, is conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

# **12. OPERATOR'S REPRESENTATIVE:**

A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Jeff Harvard HARVARD PETROLEUM CORP. P. O. Box 936 Roswell, NM 88202 Office Phone: (505) 623-1581 Cell Phone: (505) 626-7938

#### **13. CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Harvard Petroleum Corp. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

April 22, 2004

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George R. Smith Agent for: Harvard Petroleum Corp.







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EXHIBIT "E" HARVARD PETROLEUM CORP. James Federal, Well No. 11 BOP Specifications

